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Past Futures: From Re-enactment to the Simulation of History in Computer Games

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Abstract: *»Vergangene Zukunft. Vom 'Re-enactment' zur Simulation von Geschichte in Computerspielen«*. History is one of very few academic disciplines that do not investigate simulation. This is probably due to the fact that historical reality cannot be changed retrospectively nor extended into the future. In a strict sense, the simulation of history is a contradiction in terms. Nevertheless several fields of application have emerged over the past decades: there are simulations of history in the pre-modern sense of mimesis; there are re-enactments (a performative way of 'simulating' history; there are digital simulations of history, mainly in computer games that allow the player to influence the course of events, and there are didactic applications intending to make history experienceable. In this article, I will first discuss some examples from the different fields of application before I will analyze the impact of the simulation of history in different media on our notion of history.

Keywords: Simulation, Computer Games, Re-enactment, Past Future, Historical Theory.

Until the end of the 19th Century science was based both on theories and on experiments. In the course of the 20th Century a third method of gaining knowledge emerged, which – more or less unnoticed by the public – came to be a crucial instrument of almost all scientific disciplines: simulation. Intuitively, we assume that this method will be applied in exact sciences rather than in humanities and social sciences. However, simulations are not only implemented in flow channels or in flight simulators but also in media, economics and political sciences. Even in literary studies a debate came up on whether a novel or a poem simulates reality; however, since literary studies deal with fiction the term simulation might here be mistaken for a synonym of fantasy worlds.

In contrast, history seem to be the only academic discipline which successfully avoids to discuss the impact of simulation on processes of gaining knowledge, even if at the same time non-scientific simulations of history – especially in computer games – have become very popular.

In this article I will first define the term simulation in historical perspective. I will then present three cases of history simulation covering didactic material, entertainment and art. Finally, I will analyze the impact of popular historical simulations on our conception of history.

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1. Defining Simulation

A simulation is the copy of a dynamic system or process, which would be too complicated, dangerous or expensive (or literally impossible) to be implemented in reality, like, e.g., the landing of a damaged aircraft in a hurricane or a fire in a nuclear plant. First of all, we should distinguish analogue simulations (like crash tests) from digital simulations. Also we should distinguish between 'exact' simulations as practiced by physicists, chemists or engineers, and 'hypothetical' simulations developed by social and political scientist (for example in election forcasts, social engineering, economic steering or city planning). They serve purposes as different as the training of pilots, weather forecast or the management of crises and catastrophes (Schönberger 1988; Bolik 1999; Himmelsbach 2007).

According to an etymological lexicon the verb *to simulate*, which is derived from the Latin *simulare*, has been used in the sense of making something similar, imitating or pretending something since the 16th Century. In German, for example, a *Simulant* is a healthy person pretending to be ill, while a *Simulator* is termed as an installation "for the model-like imitation of real processes".[1] Principally we could call a novel or a movie a simulation; however, they are both fiction, meaning that they outline alternative realities, not predictions based on scientific knowledge. In fact we can observe that language is leaking behind reality, for today a simulation in the strict sense is no more the imitation of something 'real' but a dynamic, data-based extension of past and present into the future.

The fact that historiography is one of very few fields in which simulations have not become a central research instrument seems to be self-understanding for historical knowledge can by no means bring about exact prognoses for the future. Since history is full of contingencies, idiosyncrasies and arbitraries, the 'simulation of history' is a contradiction in terms.

Still, history – as mentioned above – is subject to various simulations outside academic historiography, namely in computer games and – with certain constraints – in didactics and in re-enactments. I will now discuss few examples from each of these fields before I will finally analyze their impact on our understanding of history.

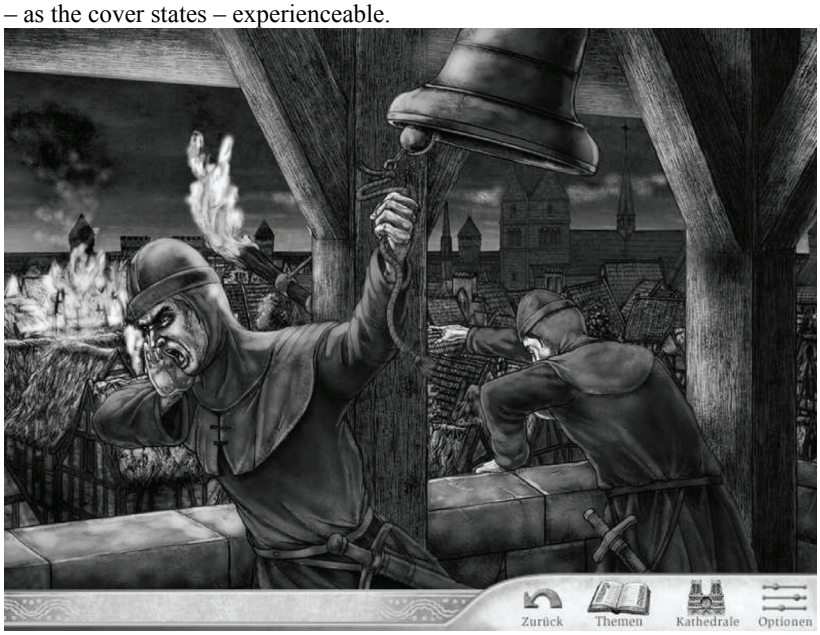
1.1 Didactic applications

My first example is a CD-ROM entitled *Of Cities and Citizens* (Von Städten und Bürgern), which was produced by the *Free Historians' Office* (freies historiker büro) in Bergisch Gladbach in 2004. On the Cover the program is de-

1 Herkunftswörterbuch. Etymologie der deutschen Sprache. Mannheim et al.: Dudenverlag 1997, 676.

scribed: “Experience the Middle Ages in a new dimension! Visit the market and talk to tradespeople, money changers and merchants; look at workshops and watch the craftsmen at work; pass the city gate and let your eyes roam to the horizon, where you can see terrifying gallows on a hill.”

Clearly, this description evokes a dynamic environment in which we can communicate with virtual persons. However, this CD-Rom offers but a set of images organized by a static menu; we can slightly change perspective and open pop-up windows providing information, but we cannot interact with the program and its protagonists. It is static, rather than dynamic (Figure 1). The images are drawings, and they do not pretend to be photo-realistic. We can conclude that this application is not a simulation but the digital version of a picture book. The Middle Ages shall be illustrated; however, the do not become – as the cover states – experienceable.



Another and technically more complex example is an animated movie showing the inside of an the tomb Nefer-Tor-Ptah at Giza (Egypt). This little movie, which was developed by rekonstruktionen.net, is only 30 seconds long. It was not explicitly made for didactic purposes; however, unlike *Of Cities and Citizens*, it is dynamic and it makes the recipient think that he is himself moving through the inside of the tomb. Even if he is not able to steer the program, he could imagine to be a tomb raider, archeologist or tourist. It is a journey through space and time and the purpose is not to gain knowledge but to bring

about a perception of the past. Here, history is part of a culture in which virtual expeditions into the past become ever more common.[2] However, it may be doubted that expeditions of this kind are suitable to improve our understanding of complex historical processes.

1.2 Computer Games

There are uncounted computer games visualizing historical events or epochs, like, eg., *Medieval* II with add-ons like *Total War* or *Kingdoms*. The cover states: "Medieval Europe is at your feet. Command one of 21 factions over half a century of bloodshed and war. Try to subdue medieval Europe and the Holy Land through negotiation, by playing off the different faiths, through diplomacy and brilliant crusades. … Your task is to master the zealous crusades, the bloody decisions of the Teutonic Wars, a disastrous rebellion in the conquest of Britain and, finally the tempting, mysterious and fatal fight for the American continent in four campaigns." (Figure 2)[3]

2 For examples of didactic and popular applications see Dickson 2000; Fischer 1994, Heimann-Störmer 1991, Lowe 1985, Masuch 2001, Sosnoski 1006, Witschi 2006, and Zöller 2006.

3 See the product descriptions at Amazon, <http://www.amazon.de/Medieval-II-Total-War-Gold/dp/B000W125EG/ref=sr_1_1?ie=UTF8&s=videogames&qid=1200558787&sr=1-1> (accessed February 23, 2009).

Aside from this sort of expedition into the medieval world there are many simulation games covering the more recent past. While many games with pre-modern subjects are strategic games, those playing in the Twentieth Century are often mere war games and many of them are First Person Shooters in which the player fights sees the three-dimensional digital world through the eyes of a fictitious fighter trying to kill as many enemies as possible. The Second World War is particularly popular; however, also World War I, the Vietnam War and the wars in Bosnia and Iraq are common backgrounds for this kind of computer game.

Air Conflict, for example, enables the player to compete with pilots of the Allied Forces in WWII whose hit rates are historically documented and serve as references in the course of the game.[4] *Battlefield 1942* imitates urban warfare in Berlin in WWII (which, as is well known, took place in 1945, not in 1942, Figure 3). The designer of a flight simulator named *IL-2-Sturmovik* advertises the game with the words: "Fly for the Germans, the Russians, the Brits or Americans at different war sites in Europe or as a Japanese bomber pilot over the Pacific."[5] Add-ons are named *Normandy 1944*, *Battle of Britain 1941*, *Pacific Fighters* or *Ostfront Reloaded*. It is evident that such games do not intend to enhance historical knowledge but that – sometimes unintentionally funny – the vocabulary of the entertainment industry is projected onto historical events. This is applicable also for the background music, especially in clips produced by users for web forums, official game sites or youtube. These clips are not about history but about a certain kind of war aesthetics, which does not evoke Prussian militarism but rather the certain media favored by pop- and subcultures.[6]

There are several reasons to choose war as a setting for computer games: for once, there is a certain militant tradition to the medium itself; second, it is in the nature of things that question of victory and defeat are more suitable for games (which, after all, have to end at some point) and military history is full of such decisionist moments. In the course of a computer game, the decision happens to produce alternative futures along the way: What would have happened, if the British had conquered South America instead of the Spanish?

4 See the product descriptions at Amazon, <http://www.amazon.de/Frogster-Interactive-Pictures-AG-Conflicts/dp/B000EMG7J2/ref=pd_sbs_vg_3/028-9167129-8542127> (accessed February 23, 2009).

5 See the product descriptions at Amazon, <http://www.amazon.de/IL-2-Sturmovik-Luftkrieg-Europa-1940-1945/dp/B000OVL5WC/ref=pd_sbs_vg_img_5> (accessed February 23, 2009).

6 See, for example, Battlefield vs. Eminem, <http://www.youtube.com/watch?v=opejV0VVWQI> (accessed February 23, 2009); Air Conflict „Ju-87 Stuka" air support mission, <http://www.youtube.com/watch?v=HX1mq2bpmvY> (accessed February 23, 2009); World in Conflict Music Video (<http://www.youtube.com/watch?v=Lp7UszB9GaI>) (accessed February 23, 2009).

How would World War II have ended if the Russians had lost the battle of Stalingrad or the Americans had won the Vietnam War?

We assume that such ideas are familiar to gamesters. However, this does not mean that there is any meaning to them outside the game. Rather, its thrill seems to lie in the mere possibility of influencing historical (or, for that matter: parahistorical) events while the question of who would win or loose which war is of no importance whatsoever. Nevertheless we can't help asking a question which Reinhart Koselleck, Alexander Demandt, Christoph Rodiek and Lucian Hölscher have asked, namely whether historical research forces the historian to "deliberately ignore what happened later". It is necessary to "measure the openness of the past future and thus acknowledge that what really happened did not necessarily have to happen; that is was not clearly predictable but at best only one of several different possibilities" (Hölscher 2003, 52).

Players of historical computer games seem to be fully aware of this. In an internet forum for the game *Call of Duty* a person named *Lord Craigus* comments on the victory of the Soviet army at Stalingrad: "Despite what they did they were part of the Allied force, and in Stalingrad, they were fighting for a city, which if captured, could literally spell the end of their country."[7]

7 Comment on Stalingrad E3 2004 trailer at <http://de.youtube.com/watch?v=qxY-1qwhX54> (accessed February 23, 2009).

1.3 Re-enactment

Before commenting on this comment myself I would like to discuss a third group of historical simulations stemming from fine art and brought to my attention by an exhibit entitled *History Will Repeat Itself* which was presented by *KunstWerke* in Berlin in 2007. The exhibit showed, among others, several artworks dealing with strategies of historical re-enactment.

First of all we should distinguish between the re-enactment itself and its presentation in different media (like film, photography, painting etc.). For example, Heike Gallmeier took photographs of a re-enactment of a World War II battle in Normandy in 2004; the exhibit showed large reprints of these photographs called *War&Peace Show*, showing both the actor-soldiers and a crowd of spectators in contemporary outfits (Figure 4). *War&Peace Show* is a kind of 'analogue' simulation of the historical battle conducted by 'real' persons who themselves are mirrored by a photograph. While, according to the catalogue, re-enactments eliminate "the distance between the historical event as represented in the media and the immediate present, between actors and audience". They enable "an experience of the past in the presence" (Arns 2007, 7). In fact, re-enactments are simulations, which, in the course of their execution, point at their own limits. While the simulation (like science fiction) "extrapolates the future from an assumption (that is, potential), re-enactments always refer to concrete, past events (that is, actual). And whereas a simulation (in most cases) remains in virtual reality, a re-enactment by implication means translation into a real space with real objects and people" (Arns 2007, 9).

However, other works of art shown in the *KunstWerke* exhibit assert that there is a smooth transition between re-enactment and simulation. The video game *Waco Resurrections* is a game for one person who needs to wear a special helmet, the so-called *Koresh skin*. In order to start the game, the player needs to say: 'I am David Koresh' (Figure 5). The game will then 'simulate' the events that lead to a massacre in the headquarters of the Branch Davidian Sect in Waco, Texas in 1993. The player relives the massacre through the eyes of David Koresh, the head of the sect who prompted the massacre for reasons still unknown. Since the player is allowed to act himself, he is not forced to repeat what – according to the little knowledge we have – really happened. He is allowed to act himself and change the course of the event or at least some variables.

The game was designed and produced by a group of six artists who were not interested in commercial promotion. The game (or installation) bears some resemblance to the kind of First Person Shooter mentioned above, however, it does offer a kind of social or cultural criticism because it does not limit itself to a pop-cultural exploitation of war but forces the player to verbally articulate him- or herself and thus to communicate with nonviolent means.

This presentation of different re-enactment, simulations and hybrid forms leads me to ask some historic-philosophical questions: In which way do simulations change the sequence of past, presence, and future? How do alternative

past futures relate to historical reality? In which way do pop-cultural exploitations of the past change our notion of history?

2. The Impact of Historical Simulation on our Notion of History

The changes brought about by the emergence of simulation as a scientific method and medium were first discussed in the field of philosophy. On a reflexive meta-level, especially philosophers of post-modernity have interpreted simulations as a symptom for the emergence of a virtual hyper-reality (Baudrillard 1981; Venus 1997). According to their radical critique, in this hyper-reality knowledge will be replaced by information, the great master narratives will be replaced by stories and identity will be replaced by subjectivity. Since some philosophers assume that reality proper is but a self-referential system of signs and representations, they assume that a hyper-reality, in which even signs and representations are merely duplicated, is but a technical hypostatization of sensual perception and experience and rapidly moving away from reality. We find this position in the writings of, e.g., Jean Baudrillard and Francois Lyotard who simultaneously diagnosed the 'end of history' in the sense of a coherent master narrative.

This diagnosis, according to which reality has turned into a simulated hyper-reality, has itself come under harsh criticism. Lorenz Engell, professor for media studies, has pointed out that Baudrillard in his analysis neglects any imaginary momentum and drawn our attention to the fact that all simulations, especially those designed to play or entertain, literally bear a fantastic momentum (Engell 1994). In other words, postmodern philosophers, equate simulation with a technical practice and not as a scientific method or a (positive) cultural achievement. In fact, simulations have become part of our daily life to such extent that the critique of postmodern philosophers appears to be but sophistry. (Aside, the idea that history can be told as one coherent master narrative has long been abandoned by historiography; however, this does not mean that historians have lost faith in the profession.)

Given that postmodern philosophers have reflected on simulation for roughly 25 years it is striking that simulation as a cultural technique and as a means for gaining knowledge has not been scrutinized from the perspective of the philosophy of history. Those who investigate Simulation as an entertaining medium has been reflected on in the fields of aesthetics; they regard simulation to be a modern and dynamic kind of *simulacrum*, i.e. a blueprint of reality (Jung 1995). My impression is that the dynamisation of the ancient simulacrum is not only an extension of the field of application but a quantum leap in cultural history: We can repeat different processes under varying circumstances and thus create an "as-if-world" which is not only flexible in its spatial, but

also in its temporal structure; a kind of time machine able to generate uncounted parallel (hi)stories.

A cultural-historical reflection on simulation will enhance our understanding of scientific cultures in the Twentieth Century, and it will even more enhance our understanding of our notion of reality, especially historical reality under the impact of simulation. Wherever history will be simulated, past futures will emerge that prove Hannah Arendt's seemingly banal statement: "I could always have turned out differently" to be true.

The result is that we will have to deal with past futures, which – in the sense of Koselleck, Demandt and Hölscher – will broaden our historical consciousness in that they inform us about historical alternatives and keep us from interpreting historical events in the wake of their aftermath. The result is also, that we will have to deal with fictitious worlds apt to disturb the sense of historical reality of those who permanently face them. A German society, in which two thirds of all schoolchildren do not have any idea who set up the Berlin Wall (and many think that urban warfare in Berlin took place in 1942, as the game Battlefield 1942 seems to indicate), this is more than alarming (Clauss 2007).

It is common sense that historical progress cannot be simulated, or, to put it differently, that we cannot know what will be in the future. Nevertheless, several institutions have tried to scientifically predict the outcome of historical events – like, for example, the Nixon administration during the Vietnam War. In a book on the Vietnam War, US military expert and colonel of the infantry Harry G. Summers spreads the following anecdote: "When the Nixon Administration took over in 1969 all the data on North Vietnam and on the United States was fed into a Pentagon computer – population, gross national product, manufacturing capability, number of tanks, ships, and aircraft, size of the armed forces, and the like. The computer was then asked, '*When will we win*?' It took only a moment to give the answer: '*Your won in 1964!*'." (Summers 1981, 11; cf. Pias 2002, 271)

Under the impact of this anecdote we can understand that mankind would – in vain – try to predict its future by means of data based simulation. However, the question in which way attempts to simulate history have already changed our understanding of the past and its relation to the present and the future remains open.

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